gases into the impeller housing from the furnace, wherein the rotating impeller expels the cooling air and the exhaust gas from an outlet formed in the impeller housing.

4. (New)The method of claim 3 further comprising the step of providing at least one aperture in a back plate of the impeller such that cooling air can pass through the back plate of the impeller.

5. (New)The method of claim 3 wherein the motor housing is sealed to the impeller housing.

6. (New)The method of claim 3 wherein the motor shaft passes through the inlet port between the motor chamber and the impeller chamber.

7. (New)A furnace blower assembly for expelling exhaust gases from a furnace, the blower assembly comprising:

a motor having a motor shaft;

a motor housing having an open motor chamber configured to receive and enclose the motor, the motor housing including at least one vent aperture for allowing external cooling air to enter the motor chamber of the motor housing;

an impeller housing mounted to the motor housing and having an open impeller chamber, the impeller housing including an inlet port for providing fluid communication between the impeller chamber and the motor chamber; and

an impeller enclosed within the impeller housing and mounted to the motor shaft for rotation with the motor shaft, wherein rotation of the impeller draws cooling air into the impeller chamber from the motor chamber for cooling the motor and draws the exhaust gases from the furnace into the impeller chamber.

8. (New)The furnace blower assembly of claim 7 wherein the motor housing is sealed to the impeller housing such that cooling air can enter the motor housing through only the vent aperture.

9. (New)The furnace blower assembly of claim 7 wherein the impeller includes a back plate and a plurality of fins, wherein the back plate includes a plurality of apertures.

10. (New)The furnace blower assembly of claim 7 wherein the motor shaft extends through the inlet port.

11. (New)The furnace blower assembly of claim 9 wherein the apertures formed in the back plate of the impeller allow the cooling air to pass through the back plate.

12. (New)The furnace blower assembly of claim 7 wherein the impeller housing includes an outlet in communication with the impeller chamber such that rotation of the impeller expels the exhaust gases and the cooling air from the impeller housing through the outlet.

IN THE ABSTRACT:

Please amend the abstract as follows:

A method of cooling the bearings of a motor in a motor housing for a furnace assembly is disclosed comprising an aperture in the motor housing whereby air is brought into the motor housing and drawn around the motor via an impeller into the impeller housing thereby eliminating the need of a separately attached fan to cool the motor or motor bearings. The impeller pulls the air from the motor housing into the impeller housing or blower via an inlet port in the impeller housing and apertures in the back plate of the impeller and out an exhaust port situated in the impeller housing.

REMARKS

In the Office Action of September 13, 2001, the Examiner initially objected to the drawings under 37 CFR 1.83(a). Specifically, the Examiner stated that several features of the invention specified in the claims were not shown in the drawings. By the present amendment, the applicant has submitted new drawings that